

AZAMATOV, V.I.

Some results of the study of the infiltration of drilling muds
in oil and water-bearing layers. Geol. nefti i gaza 9 no. 4: 37-41
Ap '65. (MIRA 18:8)

1. Tatarskiy neftyanoy nauchno-issledovatel'skiy institut, g.
Bugul'ma.

KINZIKFYEY, A.R.; KHATREDINOV, N.Sh.; AZAMATOV, V.I.

Importance of studying the mode of oil occurrences when calculating reserves. Geol.nefti i gaza 6 no.5:56-58 My '62.
(MIRA 15:5)

1. Tatarskiy nauchno-issledovatel'skiy neftyanoy institut.
(Shugurovo region (Tatar A.S.S.R.)--Petroleum geology)

DEMENT'YEV, L.F.; BAD'YANOV, V.A.; AZAMATOV, V.I.

Study of the relation of natural potentials to porosity and permeability. Razved.i prom.geofiz. no.43:114-117 '62.

(MIRA 15:8)

(Romashkino region---Oil sands---Permeability)

ZAHRADNIK, R.; RERICH, R.; AZAMIT, P.; REZABKOVA, M.; SKRAMOVSKY, S.

Reaction of some cations of heavy metals with slightly soluble calcium compounds. Coll Cz Chem 25 no.1:146-158 Ja '60. (KEAI 9:12)

1. Institut für Arbeitshygiene und Berufskrankheiten, Prag, und
Institut für anorganische Chemie, Karlsuniversität, Prag.
(Heavy metals) (Cations) (Calcium)

AZAN, V.

36034 Fovsednevno ukrepyat' tvorcheskoye sodruzhestvo deyateley muzki i proizvodstva.
Bol'shevik Sov. Latvii, 1949, No. 20, s. 50-54

SO: Letopis' Zhurnal'nykh Statey, Vol. 45, Moskva, 1949

AZAN, V.

Vital cause of Communists. Voen.znan. 38 no.5:9-10 My '62.
(MIRA 15:5)

1. Pervyy sekretar' Rzhskogo gorodskogo komiteta Kommunisticheskoy
partii Latvii.

(Riga--Military education)

AZANJAC, R.

"How to Prevent Tuberculosis in Children." p. 9.
(Borba Protiv Tuberkuloza, Vol. 1, no, 2, June 1953 Beograd.)

SO: Monthly List of East European Accessions, Vol. 3, No.6, Library of Congress,
Feb: 1954, Uncl.

AZANJAC, R. & BOJANIC, N.

Pulmonary aspergillosis. Tuberkuloza 15 no.3:453-459 J1-D'63.

1. Institut za tuberkulozu JNA. (nacelnik: puk. prof. dr. Mirko Tucakovic) i Institut za patologiju i sudsku medicinu (nacelnik: puk.prof.dr. Konstantir Brankovan).

S

AZANJAC, R.; BOJANIC, N.

Value of cytodiagnosis of pulmonary carcinoma in the light of our experiences. Tuberkuloza 17 no. 1/2:54-61 Ja-Apr 1965.

1. Vojni institut za tuberkulozu, Institut za patologiju i sudsku medicinu VMA.

AZANJAC, R.; GINZBERG, E.

Our experience with cuneiform resection in pulmonary tuberculosis.
Tuberkuloza 16 no.1:3-10 Ja-F '64.

1. Vojni institut za tuberkulozu (Nacelnik: puk. prof. dr. Mirko
Tucukovic).

AZANOVICH, L. P.

USSR/Biology - Physiology

Card 1/1 : Pub. 22 - 39/41

Authors : Shkortatov, G. L.; Azanovich, L. P.; and Losovskaya, G. V.

Title : Conditions of a medium and its effect on the oxygen demand of young carp

Periodical : Dok. AN SSSR 98/2, 311-312, Sep 11, 1954

Abstract : The conditions of a medium and its effect on the oxygen demand of young fish (carp) are discussed. Eight references: 7-USSR and 1-USA (1935-1953). Graphs.

Institution : A. M. Gorkiy State University, Kharkov

Presented by : Academician V. A. Engel'gardt, May 24, 1954

1ST AND 2ND FILERS										3RD AND 4TH FILERS									
PROCEDURES AND PROPERTIES INDEX																			
BC 9-3 Action of diphosphonethioic or dithiophosphonate on sodium diethyl phosphite. V. A. Abramov and M. N. Anisimovskii. J. Gen. Chem. Russ., 1942, 12, 270-271b. (CH₃)₂PO with Et₂PS₂ heated for 3 hr. under reflux, after removing Et₂S by distillation, gave the diphosphonethioic ether Et₂PS₂ (II). OCH₃PO (CH₃)₂PO, b.p. 125-5-126-4/5 mm., d₄²⁰ 1.4487. Hydrolysis with 10% HCl at 100° (sealed tube) gave diphosphonethioic acid, OCH₃PS₂CH₃, m.p. 24-25° and gave monophosphonic acid, CH₃CO₂H. The product from Na₂PO₃ in Et₂O was a white solid (CH₃)₂PS₂ and was warmed, it distilled with evolution of the water at 140-1/1 mm., gave little distillate and left a gummy mass, which when dissolved in KOH and distilled water, gave the compound, OCH₃PO₃CH₃ (I), m.p. 12-13°. Et₂PS₂ gave the compound, OCH₃PO₃CH₃ (I), m.p. 12-13°. Et₂PS₂ (I) and powdered glassy mass (not formed) I. M. Nair is removed before distilling. (II) is obtained. H. To.																			
489-11A INTERNATIONAL LITERATURE CLASSIFICATION RECORD SYMBOL RECORD NUMBER ISSUED BY ISSUED DATE ISSUED BY ISSUED DATE																			

AZANOVSKAYA, M. M.

ARBUZOV, A. Ye. and AZANOVSKAYA, M. M.

"Action of Chlorinated Acetylene on Sodium and Potassium Diethylphosphate,"
Dok. AN, 58, No. 9, 1947

SO: MLRA

A - 111755873, 11-11

Preparation and properties of esters of tetramethylene glycol phosphorous acid. A. E. Artuzov and M. M. Azanovskaya. *Izvest. Akad. Nauk S.S.S.R., Khim. Khim. Nauk* 1969, 473-9. Slow addn. of 13.8 g. PCl_3 to 11.8 g. $[\text{Me}_2\text{C}(\text{OH})_2]_4$ (I), 15.8 g. pyridine, and 50 ml. Et_2O with ice cooling, heating 0.5 hr. on a steam bath, and filtration gave 47% $\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3\text{PCl}_2$, b_p 81.5-82°, d_4^{20} 1.1562, d_4^{25} 1.1580, n_D^{20} 1.4720, with some 50% undistillable residue (contains some red P if distn. is attempted), which on cooling deposits on standing some

$\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3\text{POH}$ (II), also formed on exposure of the chloride to moisture. A similar reaction with 14.0 g. I, 19.5 g. pyridine, and 10.5 g. MeOPCl_2 in 100 ml.

Et_2O gave 51.4% $\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3\text{POMe}$, b_p 91-2.5°, d_4^{20} 1.0022, d_4^{25} 1.0449, d_4^{30} 1.0469, n_D^{20} 1.4417, and 3 g. II as residue; the ester reacts vigorously with H_2O , yielding II, while mixing 0.5 g. with 0.0 g. PhCH_3 in C_6H_6 and refluxing 5 min., gave on evapn. $\text{Ph}_3\text{CP}(\text{O})_3$.

$\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3\text{P}(\text{O})_3$, m. 228.5-31.5° (from C_6H_6); reaction of 2 g. of the ester with 1.0 g. Br_2 in CCl_4 completed by 0.5 hr.

at 90-100°, gave 2.0 g. $\text{BrP}(\text{O})_3\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3$, m. 80-90° (from ligroin), which forms a 1,4-dinitrophenylhydrazone, m. 104.5-5.5° (from MeOH). Similarly, 11.5

g. $\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3\text{PCl}_2$ and 14.0 g. pyridine in Et_2O gave, on addn. of 2.0 g. LiOH with ice cooling and warming 30

min. on a steam bath, 46.7% $\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3\text{POEt}$, b_p 75-6°, d_4^{20} 1.0322, d_4^{25} 1.0136, d_4^{30} 1.0156, n_D^{20} 1.4392 (and 1.5 g. II), which with Br_2 at 90-100° gave $\text{BrP}(\text{O})_3\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3$, identical with the above. The use of I (14.6 g.), 19.0 g. pyridine, and 20 g. PrOPCl_2

in Et_2O gave 44.9% $\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3\text{POPr}$, b_p 81.5-86°, d_4^{20} 1.0138, d_4^{25} 0.9980, d_4^{30} 0.9981, n_D^{20} 1.4400, which on heating with Br_2 4 hrs. at 90-110° and evapn. gave

hygroscopic $\text{BrP}(\text{O})_3\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3$, m. 90-1° (from ligroin). Similarly, 27.7 g. I, 41 g. BuOPCl_2 , and 37.2

g. pyridine in Et_2O gave 66.5% $\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3\text{POBu}$, b_p 105-0.5°, d_4^{20} 1.0076, d_4^{25} 0.9901, d_4^{30} 0.9780, n_D^{20} 1.4413; the latter (4.4 g.) and 0.36 g. H_2O slightly acidified with HCl react vigorously and on cooling yield II, m. 100-5.8° (from petr. ether), hygroscopic, insol. in Et_2O or C_6H_6 , giving a monomeric mol. wt. in dioxane; the Bu ester (1 g.) with 1.45 g. PhCH_3 in hot C_6H_6 gave

$\text{Ph}_3\text{CP}(\text{O})_3\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3$, m. 231-15° (from C_6H_6), giving $\text{Ph}_3\text{CPO}(\text{OH})_3$ on hydrolysis with HCl ; heating 5.2 g. Bu ester with 3 g. PhCH_3 4 hrs. to 160° in a

sealed tube gave some BuCl and $\text{PhCH}_2\text{P}(\text{O})_3\text{O}(\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_3$.

$\text{CMe}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O}$, m. 115-10.3° (from Et_2O), although heating the Bu ester with EtBr or EtI 3-4 hrs. to 180° gave 71-61% BuBr or BuI , the main reaction products could not be distd. without decomposition. G. M. Kosolapoff

AZANOVSKAYA, M. M.

PA 195711

USSR/Chemistry - Organophosphorus
Compounds

Sep/Oct 51

"Preparation and Properties of Esters of Dicyclohexyl-1,1'-Diphosphorous Acid," A. Ye. Arbutov, M. M. Azanovskaya, Chem Sci Res Inst Imeni A. M. Butlerov, Kazan' U imeni V. I. Ul'yanov-Lenin

"Iz AK Nauk SSSR, Otdel Khim Nauk" No 5, pp 544-550

Action of PCl_3 on 1,1'-dihydroxy-1,1'-dicyclohexyl (I) yielded chloride of dicyclohexyldiolsphoric acid (II). Action of $ROPCl_2$ (R = Me, Et, n-Pr, n-Bu) on I yielded respective cyclic esters of II. Esters and cyclic esters of II reacted with H_2O to form cyclic II (acid), without

195711

USSR/Chemistry - Organophosphorus
Compounds (Contd)

Sep/Oct 51

opening of ring. Cyclic esters of II reacted with Ph_3CB , $BzBr$, and C_6H_5COCl without opening of ring to form dicyclohexyldiol esters of corresponding arylphosphonic acids, contg P_3^+ atom. Esters of II, as P_3^+ derivatives, react with S to form esters of dicyclohexyldiolsphoric acid (III). In this way prepd Me, Et, and n-Pr esters of III.

195711

АЗАНОВСКАЯ, Н. Н.

✓ Action of acetyl hydroperoxide on allylfuryl alcohols.
M. M. Azanovskaya and V. I. Pansevich Kolyaca. Dokl. Akad. Nauk S.S.R. 111, 1245-6 (1958). Alkyl-furylcarbinols were treated with 80-95% $\text{Ac}_2\text{O}_2\text{H}$ in Et_2O at $20-25^\circ$ with 1:1 and 1:2 molar proportions of the reactants. With 1:1 molar ratio there were formed 2,3-epoxy-2-furylalkyl-carbinols (alkyl group shown): Et, 43%, m. $69.5-71^\circ$; Pr, 63.7%, m. $87.5-90.5^\circ$; Bu, 72.6%, m. $82-3^\circ$; iso-Am, 30%, m. $60-1.5^\circ$. Treatment of the Bu compd. with ZnCl_2 or prolonged storage resulted in decarboxylation yielding BuCHO . When 2 moles of $\text{Ac}_2\text{O}_2\text{H}$ is used for the oxidation only the Bu compd. gave a trace of the above described monoepoxy compd. The main bulk of the material from such reactions consisted of mixts. of aldehydes and acids. Thus the Bu compd. gave BuCHO , HCO_2H , AcOH , and unidentified acids. The Et compd. gave EtCHO , HCO_2H , and AcOH , as well as unidentified acids. When the reaction was stopped before completion, appreciable amts. of monoepoxy compds. could be isolated. G. A. Kosolincev

AUTHORS: Azanovskaya, M. M. and Pansevich-Kolyada, V. I. 79-2-24/58

TITLE: Alpha-Oxides of Alkyfuryl Alcohols (Alfa-Oksidi alkilfurilovykh spirtov)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 384-387 (U.S.S.R)

ABSTRACT: Since alcohol oxides of various structure are quite different from each other by their properties, the authors decided to synthesize alcohol oxides containing the furan cycle in the molecule. Oxidation of ethylfuryl, n-propylfuryl, n-butylfuryl and isoamylfuryl alcohols with acetyl hydrogen peroxide in the exact molecular ratios of the alcohol and hydrogen peroxide is described. The products obtained from the oxidation of the alcohols are listed as monoxides of the very same alcohols: 2-(1-hydroxypropyl)-oxido-2,3-furan, 2-(1-hydroxybutyl)-Oxido-2,3 furan, 2(1-hydroxyamyl)-oxido-2,3-furan and 2-(4-methyl-1-hydroxyamyl) oxido-2,3-furan. The physico-chemical properties of the alcohol oxides are described.

Card 1/2

79-2-24/58

Alpha-Oxides of Alkylfuryl Alcohols

There are 11 references, of which 7 are Slavic

ASSOCIATION: Academy of Sciences of Byelorussian-SSR, Institute of Chemistry

PRESENTED BY:

SUBMITTED: March 24, 1956

AVAILABLE: Library of Congress

Card 2/2

AZAROVSKAYA, M. M.

7 Complex compounds of salts of monovalent copper with various addends. M. M. Azarovskaya, Zhur. Obshch. Khim. 27, 1643-4 (1957). — CuX. PO_3 (n = 2 or 3) react with phosphine oxides, urea, heterocyclic bases, and phosphines, yielding CuX₂ (A is the 2nd component). The reaction is run by heating the component to form a uniform melt and cooling. Those were obtained: $CuBr \cdot PO_3$, m. 64-71°; $CuI \cdot PO_3$, m. 69-70.5°; $CuBr \cdot (n-p)P_2O_5 \cdot P_2O_5$, m. 115-17°; $CuI \cdot P_2O_5$, m. 122-3°; $CuBr \cdot P_2O_5$, m. 103-4°; $CuBr \cdot P_2O_5$, m. 135-6°; $CuBr \cdot P_2O_5$, m. 116-18°. Other complexes were not stable enough to withstand recryst. The mol. wt. were checked cryoscopically in C_6H_6 , yielding values which generally tended to be below the monomeric formulas shown, thus indicating dissociation. G. M. Korolov

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Sci. Res. Chem. Sect.

5.2620

69021

AUTHORS:

Azanovskaya, M. M., Davidovskaya, L. A. S/078/60/005/04/016/040

B004/B007

TITLE:

The Reactivity of the Complex Compounds of
Monovalent Copper With Esters of the Phosphorous Acid

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 4, pp 870 - 873
(USSR)

ABSTRACT:

The authors refer to a paper dealing with this problem by A. Ye. Arbuzov (Ref 1). When studying the complexes of the monohalogen compounds of copper with esters of the phosphorous acids, they found that compounds of the type $[\text{CuHal.P(OR)}_3]_3$ may enter into reaction with amines, nitrogen-containing heterocyclic compounds, arsines, and esters of the phosphorous acid according to the equation $[\text{CuHal.P(OR)}_3]_3 + 3\text{A} \rightarrow 3\text{CuHalP(OR)}_3 \cdot \text{A}$, where in the compounds investigated by the authors Hal means Cl, Br, I; R = C_2H_5 , iso- C_3H_7 , C_6H_5 , and A = triethylamine, aniline, pyridine, quinoline, triphenylarsine, trimethylphosphite, triethylphosphite, and tri-isopropyl phosphite. A cleavage of the trimeric complex occurs, accompanied by formation of mixed complex compounds. The authors proved that this reaction is reversible. On the basis of their experimental data, they arrive at the

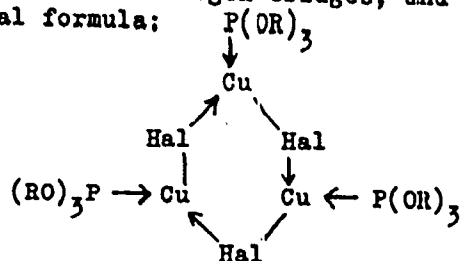
Card 1/2

The Reactivity of the Complex Compounds of Monovalent
Copper With Esters of the Phosphorous Acid

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B004/B007

conclusion that the trimeric complex compound of monovalent
copper forms by means of halogen bridges, and suggest the fol-
lowing structural formula:



There are 7 references, 3 of which are Soviet.

ASSOCIATION: Institut khimii Akademii nauk BSSR (Institute of Chemistry
of the Academy of Sciences, of the Belorusskaya SSR)

SUBMITTED: January 14, 1959

Card 2/2

AZANOVSKAYA, M.M. [Azanouskaya, M.M.]; OBLOVA, V.A. [Ablava, V.A.]

Autoxidation of derivatives of cyclohexane. Synthesis of disubstitution products of cyclohexene. Vestsi AN BSSR. Ser. fiz.-tekhn. no. 1:70-74 '60. (Cyclohexene) (MIRA 13:6)

AZANOVSKAYA, M.M. [Azanouskaia, M.M.]; ABLAYA, V.A.

Autoxidation of derivatives of cyclohexene. Effect of the nature of the substitute in the molecule of substituted cyclohexene on its oxidation. Vestsi AN BSSR. Ser.fiz.,-tekhn., no.2:55-62 '60.

(MIRA 13:10)

(Cyclohexene)

(Oxidation)

OL'DEKOP, Yu.A.; AZANOVSKAYA, M. M.

Reactions of ditertiary butyl peroxide with mercurous and mercuric acetates, with mercuric benzoate, and with metallic mercury. Zhur.ob.khim. 30 no.7:2291-2294 J1 '60.
(MIRA 13:7)

1. Institut fiziko-organicheskoy khimii Akademii nauk Belorusskoy SSR.

(Butyl peroxide) (Mercury) (Mercury acetate)
(Benzoic acid)

88478

5.3700

S/079/61/031/001/010/025
B001/B066

AUTHORS: Ol'dekop, Yu. A., Azanovskaya, M. M., and Kharitonovich, A. N.
TITLE: Reactions of Silicon Peroxides With Some Tertiary Alcohols
PERIODICAL: Zhurnal obshchey khimii, 1961, Vol. 31, No. 1, pp. 126 - 128

TEXT: Among the numerous reports published in recent years on organo-elemental peroxides El-O-O-C and El-O-O-El (El = Si, B, P, or a heavy tetra- or bivalent metal) (Ref. 8) also their reaction with tertiary alcohols in the presence of acid is described. The authors applied this reaction also to the synthesis of asymmetric organic peroxides of the ROOR' type. For this purpose they studied the reactions of triphenyl carbinol with tetra-(tert-butylperoxy)-silane, trimethyl-(α -cumylperoxy)-silane, and trimethyl-(diphenyl-methylperoxy)-silane, as well as the reactions of dimethyl-phenyl carbinol, trimethyl carbinol, and 1-methyl-cyclohexanol with tetra-(tert-butylperoxy)-silane. Reaction was carried out by interaction between the tertiary alcohol dissolved in acetic acid (in the presence of a little sulfuric acid) and silicon peroxide dissolved in ether. The reaction of triphenyl carbinol with silicon peroxides gave the

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Reactions of Silicon Peroxides With Some
Tertiary Alcohols

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B001/B066

corresponding asymmetric peroxides of the ROOR' type: the peroxides of tert-butyl-triphenyl-methyl, α-cumyl-triphenyl-methyl, diphenyl-methyl-triphenyl-methyl. They are easily separable solid products. From among the liquid peroxides the peroxide of tert-butyl-1-methyl-cyclohexyl could be obtained from tetra-(tert-butylperoxy)-silane and 1-methyl-cyclohexanol in pure condition. The reaction of tetra-(tert-butylperoxy)-silane with trimethyl carbinol, and dimethyl-phenyl carbinol proceeds in an analogous way, but the ROOR'-peroxides do not result in pure condition. The heterolytic reaction of silicon peroxides with tertiary alcohols in the presence of acids takes place according to the equation

$4ROH + Si[OOC(CH_3)_3]_4 \xrightarrow{H^+} 4(CH_3)_3COOR + Si(OH)_4$ in the case of tetra-(tert-butylperoxy)-silane, and according to the equation

$ROH + (CH_3)_3SiOOR' \xrightarrow{H^+} ROOR' + (CH_3)_3SiOH$ in the remaining trimethyl-

(aralkylperoxy)-silanes. The synthesis of ROOR' peroxides does not require pure silicon peroxides as starting material which simplifies the reaction. The well accessible tetra-(tert-butylperoxy)-silane "may be of some interest for synthesis". There are 11 references: 1 Soviet, 1 US,

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Reactions of Silicon Peroxides With Some
Tertiary Alcohols

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B001/B066

6 British, and 3 German.

ASSOCIATION: Belorusskiy gosudarstvennyy universitet i Institut fiziko-
organicheskoy khimii Akademii nauk Belorusskoy SSR
(Belorussian State University and Institute of Physicoorganic
Chemistry of the Academy of Sciences Belorusskaya SSR)

SUBMITTED: February 18, 1960

Card 3/3

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S/081/62/000/007/012/033
B156/B101

AUTHORS: Azanovskaya, M. M., Ol'dekop, Yu. A., Kharitonovich, A. N.

TITLE: Silicon peroxides and their reactions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 7, 1962, 274,
abstract 7Zh347 ("Sb. nauchn. rabot. In-t fiz.-organ.
khimii AN BSSR", no. 8, 1960, 32-36)

TEXT: The reactions of $\text{Si}[\text{OOC}(\text{CH}_3)_3]_4$ (I), $(\text{CH}_3)_3\text{SiOOC}(\text{C}_6\text{H}_5)(\text{CH}_3)_2$ (II) and $(\text{CH}_3)_3\text{SiOOCCH}(\text{C}_6\text{H}_5)_2$ with $(\text{C}_6\text{H}_5)_3\text{COH}$ (III), and of I with $(\text{CH}_3)_2(\text{C}_6\text{H}_5)\text{COH}$ (IV), $(\text{CH}_3)_3\text{COH}$ (V) and 1-methyl cyclohexanol (VI), in the presence of acids, have been studied. During the reaction between an acetic-acid solution of III with an ether solution of II, in the presence of a small amount of H_2SO_4 , $(\text{C}_6\text{H}_5)(\text{CH}_3)_2\text{COOC}(\text{C}_6\text{H}_5)_3$ is formed (yield 81% and melting point 167-169°C). $(\text{C}_6\text{H}_5)_2\text{CHOOOC}(\text{C}_6\text{H}_5)_3$ (yield 72% and melting point 88-89°C) and $(\text{CH}_3)_3\text{COOC}(\text{C}_6\text{H}_5)_3$ (yield 78% and

Card 1/2

Silicon peroxides and their ...

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B156/B101

melting point 70-71.5°C) were produced in an analogous manner. During the reaction between I and VI, $(\text{CH}_3)_3\text{COO}(\text{C}_6\text{H}_{10})\text{CH}_3$ is formed (yield 43% and boiling point 28-29°C/2 mm Hg). The pure peroxide was not successfully produced in the analogous reaction of I with IV and V. The reaction mechanism is discussed. [Abstractor's note: Complete translation.]

Card 2/2

OL'DEKOP, Yu.A.; AZANOVSKAYA, M.M.; KHARIIONOVICH, A.N.

Reactions of silicon peroxides with some tertiary alcohols.
Zhur, ob. khim. 31 no.1:126-128 Ja '61. (MIRA 14:1)

1. Belorusskiy gosudarstvennyy universitet i Institut fiziko-
organicheskoy khimii Akademii nauk Belorusskoy SSR.
(Silane) (Methanol) (Cyclohexanol)

AZANOVSKAYA, M.M.; YEMEL'YANOV, N.P.; KUDRYASHOVA, N.D.; ROMANOVSKAYA, L.P.

Condensation of 1,3-cyclohexadiene with some ethylene dienophiles.
Dokl. AN BSSR 9 no.2:97-100 F '65. (MIRA 18:5)

1. Institut fiziko-organicheskoy khimii AN BSSR.

YEMEL'YANOV, N.P.; AZANOVSKAYA, M.M.; KUDRYASHOVA, N.D.

Intermolecular hydrogen disproportionation in the system
cyclohexadiene - benzil. Dokl. AN BSSR 9 no.9:588-590 S '65.
(MIRA 18:11)

1. Institut fiziko-organicheskoy khimii AN BSSR. Submitted January
12, 1965.

AZANOVSKAYA, M.M. [deceased]; YEMEL'YANOV, N.P.; SEMYACHKO, R. Ya.;
KUDRYASHOVA, N.D.

Disproportionation of hydrogen in 1,3-cyclohexadiene under thermal
dimerization. Dokl. AN BSSR 9 no. 11:729-732 N '65
(MIRA 19:1)

1. Institut fiziko-organicheskoy khimii AN BSSR.

YARCHUK, I.I., kand. sel'skokhoz. nauk; AZANOV, A.G.

Effect of ammonia water on the active life of micro-organisms.
Torf. prom. 40 no.6:23-27 '63. (MIRA 16:10)

1. Dnepropetrovskiy sel'skokhozyaystvennyy institut.

AZARASHVILI, P. B.

25730 AZARASHVILI, P. B. Za Da'ney-Shee Razvitie Vinogradarstva V Rassey
strane. Vinodeliye i vinogradarstvo SSSR, 1948, No. 6, s. 4-7.

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1948.

AZARASHVILI, P. B.

27198 AZARASHVILI, P. B. - Obraztsovo Provesti Sezon Vinodeliya. Vinodelie I Vinogradarstvo
SSSR, 1949, No. 8, s. 1-5.

SO: Iotopis' Zhurnal'nykh Statey, Vol. 36, 1949.

AZALASHVILI, P. S.

Wine and Wine Making

New advances in production. Vin. SSSR 12, no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

AZARASHVILI, P. B.

Wine and Wine Making

We are introducing the latest techniques, Vin.SSSR 13, No. 3, 1953

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

AZARASHVILI, P.B.; GERASIMOV, M.A., professor; DAMASKINA, G.V., redaktor;
GOTLIB, E.M., tekhnicheskiy redaktor

[Georgian grape wines and brandy] Vinogradnye vina i kon'iaki
Gruzii. Pod red. M.A.Gerasimova. Moskva, Pishchepromisdat, 1955.
75 p. (MLA 8:11)

(Georgia--Wine and wine making) (Georgia--Brandy)

AZARASHVILI, P.B.

USSR/Chemical Technology. Chemical Products and Their Application -- Fermentation industry, I-27

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6516

Author: Azarashvili, P. B., Mgaloblishvili, G. I.

Institution: None

Title: Production of Semi-Sweet Wines in Georgia

Original

Publication: Vinodeliye i vinogradarstvo SSSR, 1956, No 3, 8-11

Abstract: The technology of preparation of white and red semi-sweet wines, in Georgia, consists in sulfitization of must (150-200 mg SO₂ per liter), settling for 18-24 hours and fermentation to 8-9% residual sugar. Then the wine is cooled and subjected to frequent transfer, without exposure to air, with filtration. After the sugar content is 5-7% the wine is aged for 2 months at 2-3°, bottled with filtration and pasteurized in the bottles. To produce a semi-sweet sparkling wine, of the Chkhaveri type, the must, after sulfitization and settling for 18-26 hours, is subjected to a cold treatment, at -2°, for 2-2.5 months. Thereafter the must is fermented in acratophors to a sugar content of 4%, the wine is cooled to -5° -6° and filled at -1° into champagne bottles.

Card 1/1

L 52260-65 EBF(n)-2/EPK(r)-2/ERT(r)/FMA(c)/EMP(b)/T/EMP(t) Pu-4 IJP(c) ES/

ACCESSION NR: AF5012470

UR/0039/65/018/004/0357/0361

AUTHOR: Ivanov, V. Ye.; Zelenskyy, V. F.; Kunchenko, V. Y.; Royenko, N. H.; Stuk-
nlov, A. I.; Vorob'yev, H. A.; Anarenko, A. V.

TITLE: Relation between texture and radiative growth in uranium rods

SOURCE: Atomnaya energiya, v. 18, no. 4, 1965, 357-361

TOPIC TAGS: reactor fuel element, uranium reactor fuel, reactor fuel texture,
radiative growth, fuel element stability

ABSTRACT: The authors analyze the textures produced in uranium during its heat
treatment and establish a quantitative connection between the texture and the co-
efficient of radiative growth in uranium. This research was undertaken in connection
with the development of a wire-type fuel element (I. I. Khristenko et al., paper
at Second Geneva Conference). The material tested was 99.78-99.80% pure uranium
4 mm in diameter subjected to β -treatment at temperatures of 200-300, 450-470,
and 480C. The texture was investigated by means of x-ray structural and dilatometric
analysis. The texture description as related to the anisotropic radiative growth
was based on the "growth index" method proposed by E. Strurcken and W. McDonall
(J. Nucl. Materials, v. 7, 85, 1962). Curves are plotted of the radiative growth.

Cord 1/2

L 52260-65

ACCESSION NR: AP5012470

0

O_1 against the growth index OI and are found to be independent of the treatment temperature. The elongation component due to the radiative growth as a result of the texture is calculated and its dependence on temperature is evaluated. An increase in treatment temperature results in a comparatively small increase in elongation, due probably to swelling. A load of 0.25 kg/mm^2 along the sample axis produced at 470°C an insignificant increase in elongation. It is shown that the average values of the coefficients of linear thermal expansion measured in one direction do not describe the character of texture if the latter is not uniaxial. It is concluded that uranium wire with weakly pronounced texture may be highly sensitive to factors not connected with the initial structure. Orig. art. has: 4 figures. [02]

ASSOCIATION: none

SUBMITTED: 04May64

ENCL: 00

SUB CODE: NP

NO REF SOV: 007

OTHER: 004

ATD PRESS: 4010

Card 2/278

ACCESSION NR: AP4029694

S/0089/64/016/004/0325/0332

AUTHORS: Ivanov, V.Ye.; Zelenskiy, V.F.; Stukalov, A.I.; Azarenko, A.V.; Ty*rina, I.V.; Gordiyenko, Ya.I.; Kunchenko, V.V.

TITLE: The relationship between the texture of hardened uranium and the type of heating and other aspects of heat treatment.

SOURCE: Atomnaya energiya, v.16, no.4, 1964, 325-332

TOPIC TAGS: phase recrystallization, heat treatment, uranium treatment, polymorphic transformation, multiple hardening, beta phase, alpha phase, phase transformation, annealed uranium, linear expansion, slow cooling, diffusion conversion.

ABSTRACT: It has now been established that the radiative growth of uranium is largely determined by the nature and prominent features of its texture. An attempt has been made to destroy the uranium texture resulting from a single hardening process by subjecting it to several such processes (up to 4 times). The result was a pulverization of the grain and disappearance of the texture, although the authors claim that the latter requires additional verification. Opinions vary as to

Card 1/2

ACCESSION NR: AP4029694

the best method of hardening uranium with a view to limiting its increasing radiation. The tests made in this connection included hardening the uranium samples in the beta- and gamma-phases, followed by the slow-cooling and water-cooling methods. The test results indicate that the texture of hardened uranium is determined primarily by the parameters of the heat treatment of the metal, and the following conclusions are therefore justified: 1) the texture of hardened uranium depends on the nature of the heat treatment but primarily on the duration of exposure to high-temperature phases; 2) the greatest destruction of the texture was noted in the samples that had been heat-treated under the effect of tensions produced by thermic gradients or external efforts, and 3) in the case of low and moderate heating speeds, the texture of hardened uranium is determined to a large extent by the technology of the uranium production and the duration of its exposure in the beta-phase before the hardening. Orig. art. has: 9 figures.

ASSOCIATION: None

SUBMITTED: 30May63

DATE ACQ: 01May64

ENCL: 00

SUB CODE: PH, NS

NR REF SOV: 015

OTHER: 005

Card 2/2

IVANOV, V.Ye.; ZELENSKIY, V.F.; KUNCHENKO, V.V.; ROYENKO, N.M.; STUKALOV, A.I.;
VOROB'YEV, M.A.; AZARENKO, A.V.

Interrelation between the texture of uranium rods and their
expansion due to radiation. Atom. energ. 18 no.4:357-361 Ap
'65. (MIRA 18:4)

AZARENKO, B.S., kandidat tekhnicheskikh nauk.

History of the specialty "Machines and technology of rolling and drawing"
at the Moscow Technical College named after Bauman. [Trudy] MVTU no.62:
3-6 '55. (MLRA 9:7)
(Rolling (Metalwork)) (Drawing (Metalwork))

SOV/133/58-9-17/29

AUTHORS: Shuralev, M. V., Nekrasov, S. G. (Engineers) and Azarenko, B. S. (Cand. Tech. Sciences)

TITLE: Review of the Book of A. A. Protasov and P. P. Zuyev, "Calibration of Rolls for Rolling High Speed Cutting Steel" Retsenziya na knigu A. A. Protasova i P. P. Zuyeva, "Kalibrovka valkov dlya prokatki bystrorezhushchey stali")

PERIODICAL: Stal', 1958, Nr 9, pp 825-827 (USSR)

ABSTRACT: The book was published by Metallurgizdat in 1956. The review is favourable.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod, MVTU im. Bauman (Zlatoust Metallurgical Works and MVTU im. Bauman)

Card 1/1

AZARENKO, B. S.

32

PHASE I BOOK EXPLOITATION

SOV/5985

Rokotyan, Ye. S., Doctor of Technical Sciences, ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 1. Moscow, Metallurgizdat, 1962. 743 p. Errata slip inserted. 9250 copies printed.

Authors of this volume: B. S. Azarenko, Candidate of Technical Sciences; V. D. Afanas'yev, Candidate of Technical Sciences; M. Ya. Brovman, Engineer; M. P. Vavilov, Engineer; A. B. Vornik, Engineer; K. A. Golubkov, Engineer; S. I. Gubkin, Academician, Academy of Sciences USSR; A. Ye. Gurovich, Engineer; V. I. Davydov, Candidate of Technical Sciences; V. G. Drozd, Engineer; N. F. Yermolayev, Engineer; Ye. A. Zhukovich-Stopha, Engineer; N. M. Kirilin, Candidate of Technical Sciences; M. V. Kovynov, Engineer; A. M. Kogos, Engineer; A. A. Korolev, Professor; M. Ye. Kugayenko, Engineer; A. V. Laskin, Engineer; B. A. Levitanetskiy, Engineer; V. M. Lugovskoy, Engineer; I. M. Moyerovich, Candidate of Technical Sciences; M. S. Ovcharov, Engineer; V. I. Pastornak, Engineer; I. L. Perlin, Doctor of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; Ye. S. Rokotyan, Doctor of Technical Sciences; M. N. Saf'yan, Candidate of Technical Sciences; V. V. Smirnov, Candidate of Technical Sciences; V. S. Smirnov, Corresponding Member, Academy of Sciences USSR; O. P. Sokolovskiy,

Card 1/13

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Rolling Industry; Handbook

SOV/5985

Engineer; O. P. Solov'yov, Engineer; M. A. Sidorkevich, Engineer; Ye. M. Tret'yakov, Engineer; I. B. Trishovskiy, Candidate of Technical Sciences; G. N. Khonkin, Engineer; and A. I. Tsolikov, Corresponding Member, Academy of Sciences USSR. Introduction: A. I. Tsolikov, Corresponding Member, Academy of Sciences USSR; Ye. S. Rokotyan, Doctor of Technical Sciences; and L. S. Al'shevskiy, Candidate of Technical Sciences.

Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobushinskaya.

PURPOSE: This handbook is intended for technical personnel of metallurgical and machine-building plants, scientific research institutes, and planning and design organizations. It may also be useful to students at schools of higher education.

COVERAGE: The fundamentals of plastic deformation of metals are discussed along with the theory of rolling and drawing. Methods of determining the power consumption and the forces in rolling with plane surface or grooved rolls are .

Card 2/13

Rolling Industry; Handbook

SOV/5985

- 1. Plate-rolling mills 453
- 2. Continuous and semicontinuous sheet-rolling mills 450
- Ch. 21. Cold-Rolling Mills (A. M. Kogos) [Abridged]
 - 1. Principal equipment of cold-rolling shops 465
 - 2. Determination of basic parameters of cold-rolling mills 483
 - 3. Auxiliary equipment of cold-rolling mills 497
 - 4. Operation and assembly of principal subassemblies of cold-rolling mills 511
- Ch. 22. Tube-Rolling Mills (N. F. Yermolayev, B. S. Azarenko) [Abridged]
 - 1. Manufacturing methods and types of seamless tubes 520
 - 2. Types of tube-rolling mills; components and layout of equipment 522
 - 3. Design of tube-rolling mills and of finishing equipment 532
- Ch. 23. Tube-Welding Mills (A. B. Vernik, M. S. Ovcharov) [Abridged]

Card 14/19

AZARENKO, B.S., kand. tekhn. nauk; AFANAS'YEV, V.D., kand. tekhn. nauk;
 BROVMAN, M.Ya., inzh.; VAVILOV, M.P., inzh.; VEINIK, A.B., inzh.;
 GOLUBKOV, K.A.; GUBKIN, S.I., akademik [deceased]; GUREVICH, A.Ye.,
 inzh.; DAVYDOV, V.I., kand. tekhn. nauk; DROZD, V.G., inzh.;
 YERMOGLAYEV, N.F., inzh.; ZHUKEVICH-STOSHA, Ye.A., inzh.; KIRILIN,
 N.M., kand. tekhn. nauk; KOVYNEV, M.V., inzh.; KOGOS, A.M., inzh.;
 KOROLIEV, A.A., prof.; KUGAYENKO, M.Ye., inzh.; LASKIN, A.V., inzh.;
 LEVITANSKIY, B.A., inzh.; LUGOVSKIY, V.M., inzh.; MEYERKOVICH, I.M.,
 kand. tekhn. nauk; OVCHAROV, M.S., inzh.; PASTERNAK, V.I., inzh.;
 PERLIN, I.L., doktor tekhn. nauk; POBEDIN, I.S., kand. tekhn. nauk;
 ROKOTYAN, Ye.S., doktor tekhn. nauk; SAF'YAN, M.M., kand. tekhn.
 nauk; SMIRNOV, V.V., kand. tekhn. nauk; SMIRNOV, V.S.; SOKOLOVSKIY,
 O.P., inzh.; SOLOV'YEV, O.P., inzh.; SIDORKEVICH, M.A., inzh.;
 TRET'YAKOV, Ye.M., inzh.; TRISHNEVSKIY, I.S., kand. tekhn. nauk;
 KHENKIN, G.N., inzh.; TSELIKOV, A.I.; GOROBINCHENKO, V.M., red.
 izd-va; GOLUBCHIK, R.M., red. izd-va; RYMOV, V.A., red. izd-va;
 DOBUZHINSKAYA, L.V., tekhn. red.

[Rolling; a handbook] Prokatnoe proizvodstvo; spravochnik. Pod
 red. E.S.Rokotiana. Moskva, Metallurgizdat, Vol.1. 1962. 743 p.

1. Akademiya nauk BSSR (for Gubkin). 2. Chlen-korrespondent Akademii
 nauk SSSR (for Smirnov, Tselikov).
 (Rolling (Metalwor))—Handbooks, manuals, etc.)

USSR / General Division, General Questions, Philosophy, Methodology A-1

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 17

Author : Azarenko, E.K.

Inst : Not Given

Title : The Struggle of M.V. Lomonosov for Materialism in Natural Sciences

Orig Pub : Nauch. tr. filoc. Belorussk. un-ta, 1956, vyp. 1, 3-63

Abstract : An exposition of the fundamental natural-scientific views and the materialistic philosophy of Lomonosov. Characterized are the statements of Lomonosov on the atom-molecular structure of matter, on the universal law of the conservation of matter and motion, on the material unity of the world, on the possibility of life on other planets, on the possibility of the origin and destruction of heavenly bodies, on the mutual bonds between organic and inorganic nature, on the regularity of the manifestations of nature and their cogniscibility, on the process of cognition of the unity of theory and practice, on the continuous development of the material world, and the interdependence of all processes originating in organic and inorganic nature, and other questions.

Card : 1/1

S/145/62/000/009/004/005
D262/D303

AUTHORS: Tselikov, A.I., Corresponding Member of the AS USSR,
Al'shevskiy, L.Ye., Candidate of Technical Sciences
and Azarenko, B.S., Candidate of Technical Sciences

TITLE: Continuous tube drawing

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashino-
stroeniye, no. 9, 1962, 145-148

TEXT: The construction and the operational tests of the
new machine for continuous tube drawing without end plugging, design-
ed by the authors and tested in 1961, are described in detail. This
5-ton machine for drawing tubes of 13 - 26 mm dia. and wall thickness
up to 2 mm, at speeds of 25 - 76 m/min consists basically of three
consecutive sections with chain feeding mechanisms, between which
drawing dies or rollers are located. Each feeding mechanism is driv-
en separately by an electric motor at speeds of 620 - 1200 rpm. Con-
clusions: This construction secures stability of the process. The
wall thickness and diameter conform to the GOST standards and the

Card 1/2

Continuous tube drawing

S/145/62/000/009/004/005
D262/D308

tube surface is of high quality. The productive capacity of the plant is higher and the elimination of the end plugging saves 3 - 4% of material. There is 1 figure.

ASSOCIATION: MVTU im. N.E. Bauman (MVTU im. N.E. Bauman)

SUBMITTED: July 12, 1962

Card 2/2

ACC NR: AR6029495

SOURCE CODE: UR/0137/66/000/006/D034/D035

AUTHOR: Azarenko, B. S.; Al'shevskiy, L. Ye.; Yermolayev, N. F.; Molchanov, A. P.;
Gavrilin, P. N.

TITLE: Study of the tube drawing process on a continuous drawing stand

SOURCE: Ref. zh. Metallurgiya, Abs. 6D238

REF SOURCE: Tr. Vses. n.-i. i proyektno-konstrukt. in-ta metallurg. mashinostr., sb. 15, 1965, 28-41

TOPIC TAGS: metal drawing, metal tube

TRANSLATION: A study was made on the continuous drawing of tube, as carried out on a newly constructed MVTU stand. The drawing capacity of the single-thread, continuous drawing stand at drawing speeds of 50 m/min was 2.8 times greater than that of an operating 7.5 tube chain stand in the Moscow Tube Plant (at speeds of 75 m/min, it was 4.2 times greater). The high productivity of the mill was due to the low friction (less than or equal to 10%) in the auxiliary operation, to the decrease of the metal consumption coefficient during the trimming of plugged up tube ends, and to the use of higher drawing speeds. The drawing speed was not limited by the strength of the tube and could be much higher than 75 m/min. The continuous process permits the elimination of tube annealing after welding, the jamming and cutting of tube ends, and pickl-

UTC: 621.774.001

Card 1/2

ACC NR: AR6029495

ing before a coating application; the processes of rinsing the inside of the tube and straightening after drawing were significantly improved. The continuous drawing mill could be made into an automatic continuously operating line for tube processing, including heat treatment and finishing. The economic advantages of operating the mill are very high productivity, and the elimination of a series of labor consuming preliminary and trimming operations, which decrease the metal output so much in operating chain mills. 8 figures, 5 tables. L. Kochenova.

SUB CODE: 11,13

Cord 2/2

188

AUTHORS: Azarenko, M.S. and Gerardi, G.V., Ingenieurs.

TITLE: Precast reinforced concrete non-traversable channels for external heating mains. (Neprokhodnye sbornye zhelezobetonnye kanaly dlya napuzhnykh teplovykh setei).

PERIODICAL: "Beton i Zhelezobeton" (Concrete and Reinforced Concrete), 1957, No.2, pp.68-69 (U.S.S.R.)

ABSTRACT: The Promstroiprojekt developed for the Chelyabmetallurgoi precast concrete channels to accomodate pipes for district heating. This standard unit saves a large amount of timber as well as labour. Four standard sizes have been selected: 600 x 400 mm, 800 x 500 mm, 1 000 x 600 mm and 1200 x 600 mm, the floors and walls are 70 mm thick and the removable top-cover 80 mm thick. The duct is constructed to withstand lorry traffic (when the duct is placed at least 50 cm underground) or loads of 2 tons/m². Concrete of Mark 200 reinforced with welded mesh is used. The weight of the unit is between 860 to 1 335 kg. The units are butt-jointed and cemented with mortar. The pipes are placed on trays which are supported by concrete blocks. The pipes are insulated and the ducts covered by slabs laid in cement mortar. Finally, two coats of bitumen are applied. The following savings can be achieved by this type of construction: Concrete - 33%, weight of material - 20 - 29%, labour - 2.8 (time saving). The Giprometz factory in Chelyabinsk

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Precast reinforced concrete non-traversable channels
for external heating mains. (Cont.)

is manufacturing precast reinforced concrete "compensation" bays assembled from standard blocks made from concrete Mark 200, the weight of the blocks being 825 - 1 950 kg each. This method makes the following savings possible: bricks - 95%, concrete -40%, reduction in weight - 60%, wastage of labour is reduced considerably. There are 4 drawings.

Azarenko M.S.

AZARENKO, M.S., insh.; GERARDI, G.V., insh.

Railroad unloading platform made of large-sized precast reinforced concrete panels. Bet. 1 shel.-bet. no.6:249-252 Je '57. (MLRA 10:11)
(Precast concrete construction) (Loading and unloading)

97-58-1-8/12

AUTHOR: Azarenko, M.S. Engineer.
Gerardi, G.V. Engineer.

TITLE: Tunnels Constructed from Large Concrete Blocks and Used for
Larger Diameter Water Pipes. (Tunnel' iz krupnykh betonnykh blokov
dlya truboprovodov bol'shikh diametrov.)

PERIODICAL: Beton i Zhelezobeton 1958. No. 1. USSR Pp 33-35

ABSTRACT: Trust Chelyabmetallurgstroy constructed for a metallurgical works
a tunnel 4 x 4.25 m in cross section and 246.5 m.m. in length.
The Chelyabinsk branch of Gipromez together with the above Trust
worked out the precast-monolithic construction for this tunnel. To
save timber and labour large standard concrete blocks were used of a
type normally used for housing and industrial foundations. Figure 1
illustrates the constructional detail of this precast-monolithic
reinforced concrete tunnel. Figure 2 illustrates the lay out of the
reinforcement. The construction was begun with in situ reinforced
concrete floor slabs on which walls from concrete blocks were
assembled. These blocks were 580 x 580 m.m in cross section and
2000 m.m long. At 2,300 m.m. centres spacing was provided in
which a reinforced concrete upstand was formed. The tunnel was

Card 1/2

97-58-1-8/12

Tunnels Constructed from Large Concrete Blocks and Used for Larger Diameter Water Pipes.

roofed with precast reinforced concrete splayed slabs 980 m.m wide. The advantages of the in situ reinforced concrete slab floor and the upstands are that supports carrying up to 500 tons could be fixed on them. Figure 3 illustrates the section of the duct adjoining the compensation niche. The advantages of this tunnel construction are the saving of 50% of reinforcement, over 50% timber approximately 50% labour and 50% construction time. There are 3 Figures.

1. Water tunnels--Design
2. Water tunnels--Materials
3. Concrete--Applications
4. Concrete--Economic factors

Card 2/2

AZARENKO, M.S., inzh.; AZARENKO, V.M., inzh.

What we learned from an accident. From. stroi. 37 no.4:62-64
Ap '59. (MIRA 12:6)

(Railroads--Earthwork)

AZARENKO, M.S. inzh. (Chelyabinsk); AZARENKO, V.M. inzh. (Chelyabinsk)

Extension joints in industrial buildings. Prom. stroi. 37 no.7:60-61
Jl '59. (MIRA 12:10)

(Open-hearth furnaces)

AZARENKO, M.S.; AZARENKO, V.M. (Lipetsk)

Faster means of calculating multispans frames of industrial plants.
Stroi.mekh.i rasch.soor. 3 no.2:39-44 '61. (MIRA 14:5)
(Structural frames)

[illegible]

AZARENKO, N. T. (ENGR)

AZARENKO, N. T. (ENGR) -- "AUTOMATIC WELDING OF STEEL ROUGHSA UNDER A LAYER OF FLUX."
SUE 11 JUN 52, SCI RES INST OF TECHNOLOGY AND ORGANIZATION OF PRODUCTION (NIAT)
(DISSERTATION FOR THE DEGREE OF DOCTOR IN TECHNICAL SCIENCES)

SO: VECHERNAYA MO KVA, JANUARY-DECEMBER 1952

AZARENKO, N.T.

AID P - 993

Subject : USSR/Engineering

Card 1/1 Pub. 11 - 7/13

Author : Azarenko, N. T.

Title : ~~Automatic welding of cylindrical articles of 30KhGSA steel~~

Periodical : Avtom. svar., #5, 66-75, S-0 1954

Abstract : Analysis of automatic welding is presented under consideration of the effects of the welding current, voltage, speed, composition of flux on the length of the bath, spill over, shape of weld, character of slag layer, appearance of crack, etc. Two tables, 7 charts, 7 sketches, 2 macro-photographs and 5 Russian references (1945-50).

Institution : NIAT (Scientific Institute of Aviation Technology?)

Submitted : D 10, 1953

AZARENKO, N.T.

Distr: 4E2c

Flux for automatic
T. Azarenko and
701, Aug. 29, 1957
Si 52, Al₂O₃ 6-9, C
up to 1, S up to 0.5
ticularly suitable for

welding of stainless
V. V. Dyachenko
The flux contains
Fe 2.5-3.5, K₂O up
and P up to 0.5%
welding thin articles

austenitic steels.
U.S.S.R. 106-
SiO₂ 31-33, CaO
0.0-1.5-3, FeO
This flux is par-
M, flux...

4
1

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Azarenko, N.T.

135-4-3/15

SUBJECT: USSR/Welding

AUTHOR: Azarenko, N.T., Candidate of Technical Sciences.

TITLE: Absorption of Manganese, Silicon, Chrome, and Carbon in Welding Steel "30X7(A)" under Flux. (Usvoeniye margantsa, kremniya, khroma i ugleroda pri svarke stali "30X7(A)" pod flyusom).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 4, pp 9-12 (USSR).

ABSTRACT: The purpose of this experimental study was to investigate the interaction of metal and slag during automatic welding of steel "30X7(A)" (also called "steel chromansil"), the composition of which is (in %): 0.27 C, 0.92 Mn, 0.88 Si, 0.88 Cr. The components of welding wire "CB-18XMA", and of the fluxes used in the investigation are given in the article. Welding was performed with an arc of 220-230 a and 22-28 v, with linear speed of 40 m/hr.

The reactions of manganese, silicon, chrome, and carbon, and the variations of concentration with varying welding conditions were studied.

It was found that the degree of reducing and of oxidizing

Card 1/3

135-4-3/15

TITLE:

Absorption of Manganese, Silicon, Chrome, and Carbon in Welding Steel "30X17CA" under Flux. (Usvoeniye margantsa, kremniya, khroma i ugleroda pri svarke stali "30X17CA" pod flyusom).

reactions (if other conditions remain unchanged) depends on the flux composition. When welding with high- and medium-manganese fluxes, manganese is being reduced from the flux, and in welding under non-manganese fluxes it burns out.

Silicon is reduced during welding under all of the studied fluxes. Carbon and chrome burn out in welding under all of the studied fluxes. Between silicon and manganese in the welding puddle there exists a definite ratio of $(Mn)^2 = (Si)K_1$ (as in welding of low-carbon steel). Ferrous oxide is the reduction product of silicon and manganese, and it can partially penetrate into the liquid metal (the quantity of ferrous oxide formed depends on the manganese content in the flux).

The tables # 3, 4, 6, 7, and 9 and a formula derived in the investigation allow an approximate pre-calculation of manganese, silicon, chrome, and carbon content in butt welds if welding is carried out under conditions approximating those described.

Card 2/3

135-4-3/15

TITLE: Absorption of Manganese, Silicon, Chrome, and Carbon in Welding Steel "30X17A" under Flux. (Usvoeniye margantsa, kremniya, khroma i ugleroda pri svarke stali "30X17A" pod flyusom).
The article contains 9 tables, 5 diagrams, and 3 references (all Russian)

ASSOCIATION: "HNAT" (NIAT).

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 3/3

44013

S/850/61/000/000/008/020
A006/A101

1 2300

AUTHORS: Azarenko, N. T., D'yachenko, V. V.

TITLE: Flux for the automatic welding of stainless austenitic steels

SOURCE: Sbornik izobreteniy; svarochnaya tekhnika. Kom. po delam izobr. i otkrytiy. Moscow, Tsentr. byuro tekhn. inform. 1961, 129
(Authors' Certificate no. 106791, cl. 21h, 30₁₆, no. 552197 of May 7, 1956)

TEXT: The flux proposed is intended for welding thin stainless austenitic steels. It is melted from chalk, kaolin, sand, fluorspar and potash or soda. The composition of the flux is, in %: CaO 48 - 52; Al₂O₃ 6 - 9; CaF₂ 2.5 - 4.5; K₂O or Na₂O 1.5 - 3. This composition has high stabilizing properties. The crust is well detachable from the weld surface. The flux is now being used in the industry.

Card 1/1

LEVIN, I.S.; SHATALOVA, A.A.; AZARENKO, T.G.

Use of alkyl phosphoric acids in analytical chemistry. Part 2:
Separation of indium from antimony and bismuth. Zhur. anal. khim.
20 no.1:62-66 '65. (MIRA 18:3)

1. Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

S/032/62/028/011/001/015
B106/B186

AUTHORS: Levin, I. S., and Azarenko, T. G.

TITLE: Determination of small quantities of indium and tin-containing materials by extraction and photometric analysis

PERIODICAL: Zavodskaya laboratoriya, v. 23, no. 11, 1962, 1313 - 1316

TEXT: A method of combined extraction was elaborated, by which small quantities of In can be separated from large quantities of Sn and other elements. Preliminary experiments showed that indium and tetravalent tin can be extracted by alkyl phosphoric acids from hydrohalic solutions, thereby, the extractability from isomolar solutions of these acids increases for In in the order $HCl < HBr < HF < HI$; but for Sn in the order $HF < HCl < HBr$. The highest values of the distribution coefficient α_{In}/α_{Sn} were obtained by extraction from hydrofluoric solutions or by shaking the organic extract with dilute hydrofluoric acid. Thus, In with a residual Sn content of only $< 10^{-4} \%$ could be separated from solutions with an Sn-to-In ratio of 50:1. Tin as well as indium were also extracted from

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hydrobromic solutions; equilibrium became established with indium after 10 - 15 sec, but with Sn only after 1 - 1.5 hrs. On the basis of this result the following method is suggested for determining In: Indium and tetravalent tin are extracted together from a 3 - 4 N sulfate solution of the sample with 2-ethyl-hexyl phosphoric acid dissolved in octane or iso-octane and are thus separated from Zn, Cd, As, Sb, Fe, Cu, Co, Ni, and Au and rapid reextraction with hydrobromic acid. Also other alkyl phosphoric acids (alkyl groups $C_5 - C_{12}$) can be used for the extraction. Indium is rapidly (1 - 2 min.) reextracted from the extract with hydrobromic acid (organic: aqueous phase = 5 : 1), whereby practically the entire Sn remains in the organic phase. In the acid extract, indium is photometrically determined in benzene solution by the color reaction with rhodamine 6Ж (6Zh). Gallium and thallium interfering with the determination are to be separated. The sensitivity of the method corresponds to $10^{-4}\%$ In for a weighed portion of 1 g; the error is 5 - 8% with In contents of 10^{-2} - $5 \cdot 10^{-3}\%$, and 15 - 30% with In contents of $5 \cdot 10^{-3}$ - $5 \cdot 10^{-5}\%$. The method was used to analyze sulfide and oxide concentrates containing 15.6-53.7% Sn, 33.6-2.11% Fe, 0.065-2.25% W, 8.1-14.4% SiO_2 , 0.2% Ti, 0.22% Pb,

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Determination of small quantities...

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B106/B186

0.4% Zn, 0.007-0.0009% In. There are 2 figures and 2 tables.

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LEVIN, I.S.; AZARENKO, T.G.

Separation of indium from bi, tri, and tetravalent metals by
extraction with alkyl phosphoric acids. Zhur. anal. khim. 18
no.11:1335-1339 N '63. (MIRA 17:1)

1. Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya
AN SSSR, Novosibirsk.

L 41494-65 EWT(a)/EWP(t)/EWP(b) IJP(c) ID

ACCESSION NR: AP5004431

8/0075/65/020/001/0062/0066

AUTHOR: Levin, I. S.; Shatalova, A. A.; Azarenko, T. G.

TITLE: Use of alkyl phosphoric acids in analytical chemistry. Communication 2.
Separation of indium from antimony and bismuth

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 1, 1965, 62-66

TOPIC TAGS: indium, antimony, bismuth, sulfuric acid, nitric acid, perchloric acid, phosphoric acid, extracting agent, oxalic acid

ABSTRACT: A method for simultaneous separation of indium from antimony (Sb III) and bismuth (Bi III) by extraction with alkyl phosphoric acid (APA) is described. First, the extraction of Sb and Bi from sulfuric, nitric, and perchloric acid solutions is studied. It is shown that at 12-13 N H_2SO_4 concentration, the percent extraction of

Sb is at a maximum with mono-di- and pyro-ethylhexylphosphoric acid. It is then shown that oxalic acid is the best medium for separating indium from Sb and a part of Bi. The separation of indium from antimony and partial bismuth separation is based on the re-extraction of Sb and Bi when indium (after flushing) is in the organic phase. This can be accomplished with practically any amount of Sb, e.g., Sb: In = 4000:1. Similarly, indium can be separated from bismuth by the

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L 41494.65

ACCESSION NR: AP500/431

re-extraction of bismuth with potassium iodide. Orig. art. has: 5 figures, 3
tables, and 1 formula.

ASSOCIATION: Khimiko-metallurgicheskii institut S O AN SSSR, Novosibirsk (Chemical-
Metallurgical Institute, SO AN SSSR)

SUBMITTED: 07Dec63

ENCL: 00

SUB CODE: GC

NO REF SOV: 017

OTHER: 008

ml
Card 2/2

L 149023-65 EWP(m)/EWP(t)/EWP(b) JIP(c) JD
 UR/0075/65/020/004/0452/0458
 ACCESSION NR: AP5011049

AUTHOR: Levin, I. S.; Azarenko, T. G.

TITLE: Use of alkylphosphoric acids in analytical chemistry. Report No. 3.
 Reextraction of indium and determination of its small quantities in ores and intermediate products of the lead-zinc and copper industries

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 4, 1965, 452-458

TOPIC TAGS: indium extraction, indium determination, ore analysis, alkylphosphoric acid, lead refining, zinc refining, copper refining, tributyl phosphat

ABSTRACT: Studies of the extraction of indium by mixed solvents revealed that the systems indium - mono-2-ethylhexylphosphoric acid (M2 EHPA) - tributyl phosphate (TBP) - mineral acid (H_2SO_4 , HNO_3 , $HClO_4$, etc.) - water, indium - di-2-ethylhexylphosphoric acid (D2 EHPA) - TBP - mineral acid-water, and others are characterized by a very substantial antagonistic effect consisting of the fact that the extraction capacity of individual M2 EHPA and D2 EHPA as well as that of other mono- and dialkylphosphoric acids and their mixtures decreases appreciably in the presence of TBP. This antagonistic effect facilitates the

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ACCESSION NR: AP5011049

reextraction, permits a considerable expansion of the assortment of reextracting agents, and the selection of a suitable aqueous phase. A rapid method of determining small amounts of indium in ores and intermediate products of the lead-zinc and copper industries is described in detail, indium being determined photometrically. The sensitivity of the method for a 1 g sample is $1 \times 10^{-5}\%$. Orig. art. has: 5 figures, 1 table, and 4 formulas.

ASSOCIATION: Khimiko-metallurgicheskii institut SO AN SSSR, Novosibirsk (Chemical-Metallurgical Institute, SO AN SSSR)

SUBMITTED: 03Mar64

KN/L: 00

SUB CODE: 10, MM

NO INT SOV: 01

OTHER: 033

Cord

2/2

AZARENKO, V. K.: Master Tech Sci (diss) -- "Investigation of the buckets of pressure-operated loaders when preparing peat for fertilizer". Minsk, 1953. 13 pp (Beloruss Polytech Inst im I. V. Stalin), 150 copies (KL, No 4, 1959. 125)

AZARENKO, M.S., inzh.; AZARENKO, V.M., inzh.

What we learned from an accident. Prom. stroi. 37 no.4:62-64
Apr '59. (MIRA 12:6)

(Railroads--Earthwork)

AZARENKO, M.S. inzh. (Chelyabinsk); AZARENKO, V.M. inzh. (Chelyabinsk)

Extension joints in industrial buildings. Prom. stroi. 37 no.7:60-61
Jl '59, (MIRA 12:10)

(Open-hearth furnaces)

AZARENKO, M.S.; AZARENKO, V.M. (Lipetsk)

Faster means of calculating multispans frames of industrial plants.
Stroi.mekh.i rasch.soor. 3 no.2:39-44 '61. (MIRA 14:5)
(Structural frames)

S/902/62/000/000/005/015
E193/E383

AUTHOR: Azarenko, V.S.
TITLE: Continuous tube-drawing
SOURCE: Novyye protsessy obrabotki metallov davleniyem;
doklady Soveshch. po novym prots. obrab. met.
davleniyem v mashinostri., 1960. Ed. by
V. D. Golovlev. Moscow, Izd-vo AN SSSR, 1962.
66 - 70

TEXT: A detailed description is given of a 5-ton pilot
plant (designed and built at the Moskovskoye vyssheye tekhnicheskoye
uchilishche im. Bauman (Moscow Higher Technical College im.
Bauman)) for continuous tube-drawing. The drawing machine is of
the caterpillar-track type, similar to those made in Italy (by
the firm "Metallogen") or USA, where they are used mainly for
drawing soft metal wires and rods. The equipment described in
the present paper can be used for drawing and sizing rods and
for drawing both seamless and seam-welded steel and nonferrous
metal tubes. The plant can be used for: 1 - drawing through one
or two dies; 2 - drawing through four roller dies and one
Card 1/2

Continuous tube-drawing

S/902/62/000/000/005/015
E193/E383

standard (ring) die; 3 - reducing; 4 - drawing on a fixed mandrel through four roller and one ring dies. The maximum size of the stock is 40 mm; this can be drawn to a final diameter of 13 - 26 mm. The maximum drawing speed is 1.26 m/sec. The equipment can be used for drawing plastic-coated steel tubes or for fabricating laminated plastic tubes. It could easily be incorporated in fully mechanized or automatic lines. Preliminary calculations have shown that the output of a tube-drawing shop equipped with a continuous drawing machine could increase 2.3 times and the productivity per one operative 5.65 times in comparison with a shop of the same floor area equipped with standard drawbenches. As a result, the capital cost of the equipment could be recovered in four months. There are 3 figures.

Card 2/2

AZARENKO, Ye.K.

M.V.Lomonosov, pioneer in natural science in Russia. Zdrav.Bel. 7
no.11:59-61 N '61. (MIRA 15:11.)
(LOMONOSOV, MIKHA'L VASIL'EVICH, 1711-1765)

AZARENKO, Yo. K., doktor filosofskikh nauk, prof.

CPSU, the party of the entire Soviet nation; on the 60th anniversary of the Second Congress of the Russian Social Democratic Party. Zdrav. Bel. 9 no. 794-8 J1'63 (MIRA 174)

AZARENKOV, P. Dyat'kovskiy rayon Bryanskoy oblasti)

How we organize production in school workshop. Politekh.obuch.
no.5:88 My '59. (MIRA 12:7)
(Dyat'kovo District--Vocational education)

AZARENOK, K.S.

Problem of "inoculation" hepatitis. Sov. med. 25 no.5:60-63 My
'61/ (MIRA 14:6)

1. Iz Vitebskoy oblastnoy sanitarno-epidemiologicheskoy stantsii
(glavnyy vrach M.A.Korenevskiy) i kafedry infektsionnykh bolezney
Vitebskogo meditsinskogo instituta (sav. - prof. A.I.Reznikov).
(HEPATITIS, INFECTIOUS)

AZAREV, D.

Increasing conductivity of electric lines. Tr. from the Russian. p. 9.
ELEKTRONENERGIJA. Sofiya. Vol. 6, no. 12, Dec. 1955.

SOURCE: East European Accessions List. (EEAL) Library of Congress.
Vol. 5, No. 8, August 1956.

AZAREV, D. I.

Increasing the Transmitting Power of Long-distance Power Transmission
Lines. Elektroenergiya (Electric Power), #12:9:Dec 55

Andriyevich, G. N.

Dissertation: "Investigation of the Effect of the Form of Gear-Teeth-Face Surfaces on the Meshing of Gear Wheels and Face Wear Resistance." Cand Tech Sci, Moscow Machine Tool and Tool Inst imeni I. V. Stalin, 2 Jun 54. Vechernyaya Moskva, Moscow, 22 May 54.

SO: SUM 284, 26 Nov 1954

12. VICH, I. M.

The VICH, I. M.: "Investigation of the effect of shape of the front surfaces of teeth on the operation of gear wheels, and the wear resistance of their front surfaces". Moscow, 1955. Min Higher Education USSR. Moscow Machine-Tool and Tool Institute I. V. Stalin. (Dissertation for the Degree of Candidate of TECHNICAL Sciences)

SC: Knizhnaya Letopis' No. 51, 10 December 1955

AZAREVICH, G.M.

~~SECRET~~
Selection of efficient curve for gear-tooth contact surfaces.
Stan.i instr. 27 no.10:1-7 0 '56. (MIRA 9:12)
(Gearing)

Modernization of Turret Lathes; Instructions 188

for expanding the technological potentialities of machine tools and examples of the modernization of basic machine tools in that category. Problems of increasing vibration stability and the reliability of machine-tool operation are discussed. The share of turret lathes in the Soviet stock of machine tools was 3.7 percent in 1940, 5.7 percent in 1945, 5.0 percent in 1950, and 4.3 percent in 1955. Most of the lathes in use at present were produced during the thirties and forties. As of 1955, there were about 75,000 turret lathes in the Soviet stock of machine tools. Only 2.2 percent of these could machine a piece part up to 80 mm. in diameter, 29.4 percent could machine a piece part up to 65 mm. in diameter, 41.5 percent could machine a piece part up to 40 mm. in diameter, and 16.8 percent could machine a piece part up to 18 mm. in diameter. There are 44 Soviet references. No personalities are mentioned.

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AVAILABLE: Library of Congress

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7-18-58

Card 4/4

25 (1,7)

PHASE I BOOK EXPLOITATION

SOV/1688

Gladkov, B. A., V.N. Alekseyev, A.N. Totksiy, V.A. Kudinov, and G.M. Azarevich

Modernizatsiya universal'nykh sverlil'nykh stankov; rukovodyashchiye materialy
(Modernization of Universal Drilling Machines; Instructions) Moscow, Mashgiz,
1958. 214 p. 5,000 copies printed.

Sponsoring Agency: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut
metallorezhushchikh stankov.

Ed.: A.Ye. Prokopovich; Ed. of Publishing House: N.A. Ivanova; Tech. Eds.:
Ye.S. Gerasimova, and A.F. Uvarova; Managing Ed. for Literature on Metal
Working and Tool Making: R.D. Beyzel'man, Engineer.

PURPOSE: This book is intended for mechanics and designers engaged in modernizing
machine tools.

COVERAGE: A brief description is given of modern universal drilling machines and
machines of obsolete design which predominate in the operating stock. Their
utilization is analyzed and on the basis of the analysis, the basic require-
ments for modernizing this type of machine tools are developed. Recommenda-
tions and concrete design solutions concerning increase of speed, feed power,
Card. 1/4

Modernization of Universal (Cont.)

SOV/1688

rigidity, vibration-stability, and life of drilling machines in the operating stock are presented. Special attention is given to problems of reducing auxiliary time. Equipping universal drilling machines with various attachments and auxiliary devices in order to widen their applicability is also described. No personalities are mentioned. There are 42 references of which 38 are Soviet, 3 English, and 1 German.

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